

Please replace the “Abstract of the Disclosure” with the following amended “Abstract of the Disclosure”:

~~A method for forming carbon~~ Carbon nanotube field effect transistors, arrays of carbon nanotube field effect transistors, ~~[[and]]~~ device structures, and arrays of device structures ~~formed by the methods. The methods include forming a~~ A stacked device structure ~~including~~ includes a gate electrode layer and catalyst pads each coupled electrically with a source/drain contact. The gate electrode layer is divided into multiple gate electrodes and at least one semiconducting carbon nanotube is synthesized by a chemical vapor deposition process on each of the catalyst pads. ~~The completed device structure includes a gate electrode~~ ~~[[with]]~~ has a sidewall covered by a gate dielectric and at least one semiconducting carbon nanotube adjacent to the sidewall of the gate electrode. Source/drain contacts are electrically coupled with opposite ends of the semiconducting carbon nanotube to complete the device structure. Multiple device structures may be configured either as a memory circuit or as a logic circuit.